PA-618

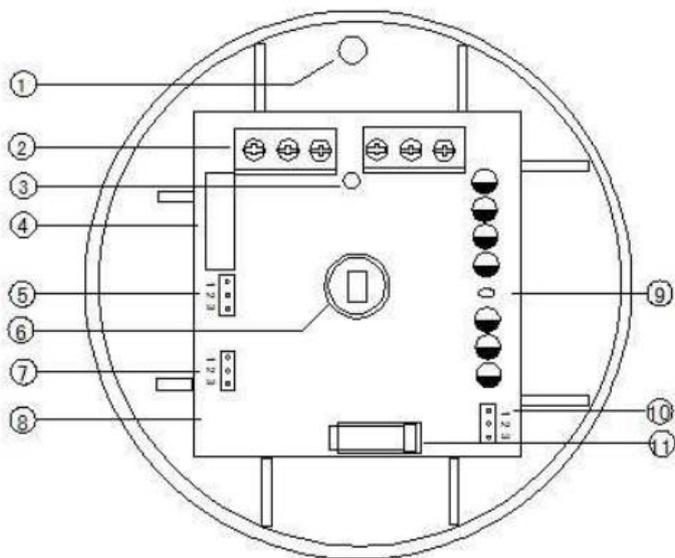**Infrared Sensor**

This product is a high stability passive infrared detector. It uses advanced signal analysis and processing technology to provide ultra-high detection and anti-false alarm performance. When an intruder passes through the detection area, the detector will automatically detect human activities in the area. If there is a dynamic movement phenomenon, it sends an alarm signal to the control host. The product is suitable for the safety protection of family residential areas, real estate villas, factories, shopping malls, warehouses, office buildings and other places.

Item	Definition
1	Cable outlet
2	Terminal block
3	LED indicator
4	Relay
5	LED jumper
6	Dual element infrared sensor
7	RELAY jumper
8	Circuit board
9	Thermistor
10	PULSE jumper
11	Tamper switch

1. Features

- Intelligent logic detection, filtering out various false positives
- True temperature compensation technology
- Bipolar pulse count adjustable

- Anti white light interference
- Anti-radio frequency interference (20V/m-1GHz)
- Fresnel optical lens
- Ceiling installation
- Alarm output NC/NO selectable
- Manufactured by SMT process, anti-radio frequency interference

2. Technical specification

Power supply	DC9-16V
Current consumption	≤18mA (at DC12)
Detection distance	8 meters in diameter (when the installation height is 3.6 meters)
Detection angle	360 degrees
Self-test time	about 60S
Alarm indication	red LED
Coverage area	24 in the far zone, 24 in the middle zone, and 6 in the near zone
Sensor	Dual element pyro-infrared sensor
Working temperature	-10℃～+50℃
Working humidity	Maximum 95%RH (non-condensing)
Anti-RF interference	10MHz-1GHz 20V/m
Installation method	Ceiling installation
Installation height	2.5-6 meters
Alarm output	NC/NO selectable, contact DC28V 100mA
Tamper output	NC, contact DC28V 100mA
Dimensions	106*36mm (diameter*height)

3. Installation condition

- Avoid installing outdoors, places with pets, near air conditioners, near heat sources, places exposed to direct sunlight, or under rotating objects.
- The installation surface should be firm and free from vibration.
- Install the detector where intruders can easily pass through.

4. Installation steps

- Unscrew the front cover of the detector counterclockwise to open the detector.
- Loosen the screws fixing the circuit board and remove the circuit board.
- Drill holes for the wires on the wire slot of the rear cover.
- Choose an appropriate height to install the back cover.
- Fix the circuit board with screws.
- Connect the terminals (as shown in the figure below).
- Install the front cover.
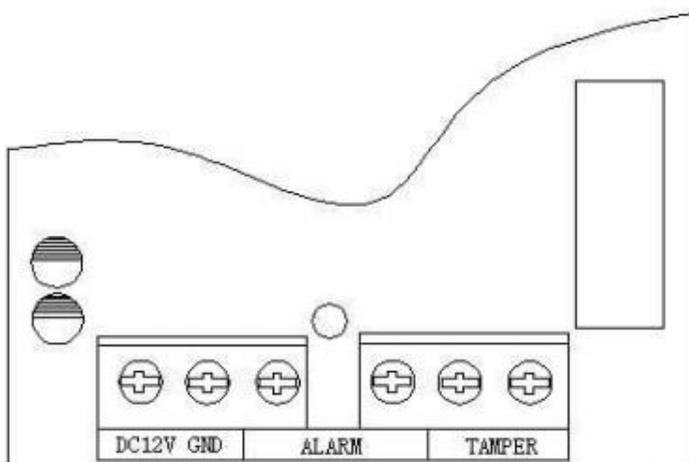
PIN	Definition
DC12V	DC positive
GND	DC negative
Alarm	Alarm output port
Tamper	Tamper output port

5. Operation guide

5.1 Function jumper setting

- PULSE jumper: pulse adjustment jumper, by adjusting the pulse count can change the sensitivity of the detector and the ability to resist radio frequency interference.

a. Choice 1&2: Class I pulse, high detection sensitivity, good anti-radio frequency interference ability, suitable for general environment;

b. Option 2&3: Secondary pulse, high detector sensitivity, stronger anti-radio frequency interference capability, suitable for environments with severe radio frequency interference;

c. Disconnect: It is a three-level pulse, with low detection sensitivity and high anti-radio frequency interference capability, suitable for environments with very serious radio frequency interference.

- RELAY jumper: NC/NO selection jumper, used to set the alarm output state, you can choose different output states according to the specifications of different types of hosts,

a. Select 1&2: N..O. (normally open state);

b. Select 2&3: N.C. (normally closed state);

c. The factory setting is 2&3 N.C. (normally closed state)

● LED jumper: used to control the LED indicator light, does not affect the normal operation of the detector.

a. Select 1&2: turn off the LED indicator;

b. Select 2&3: turn on the LED indicator;

c. In order to enhance the concealment of the detector, the LED indicator can be turned off after the test is completed.
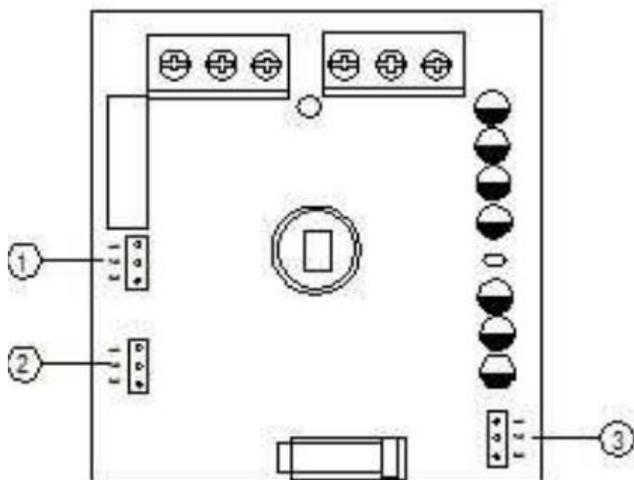
5.2 walk test

● Turn on the 12V DC power supply, the LED indicator light is on, and the detector enters the self-inspection state. The self-inspection time is about 60 seconds. When the LED indicator light is off, it means that the detector enters the normal monitoring state. The tester should walk parallel to the wall where the infrared detector is installed within the detection range, and the detector LED indicator lights up, indicating that the detector is in an alarm state.

5.3 Precautions

● Please install and use correctly according to the instructions. Do not touch the surface of the sensor, so as not to affect the sensitivity of the detector. If you need to clean the sensor, please disconnect the power and wipe it with a little alcohol.

● This product can reduce the occurrence of accidents, but it cannot be guaranteed to be safe. For your safety, in addition to using this product correctly, you must be vigilant in your daily life and strengthen your awareness of safety precautions.

● In order to ensure that the detector can work normally, the power supply of the detector should be maintained, and the walking test must be carried out periodically, and it is recommended to do it once a week.
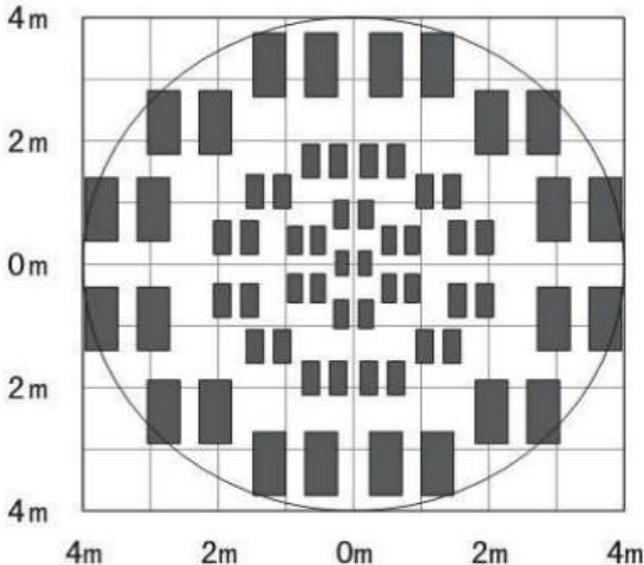
5.4 Jumper setting definition

LED jumper	1 2 3	open
RELAY jumper	1 2 3	2&3
PULSE jumper	1 2 3	1&2

6. Detection range

Top view

Side view